

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference BCS03-2003	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/EP2004/006888	International filing date (day/month/year) 23/06/2004	(Earliest) Priority Date (day/month/year) 23/06/2003
Applicant BAYER BIOSCIENCE N.V.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 7 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☒ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☒ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. _____

☐ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☒ none of the figures is to be published with the abstract.

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Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
- a. type of material
- ☒ a sequence listing
- ☐ table(s) related to the sequence listing
- b. format of material
- ☒ in written format
- ☒ in computer readable form
- c. time of filing/furnishing
- ☒ contained in the international application as filed
- ☒ filed together with the international application in computer readable form
- ☐ furnished subsequently to this Authority for the purpose of search
2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

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 International Application No
 PCT/EP2004/006888

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/82 C12N15/29 C07K14/415 A01H5/00 A01H5/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, EPO-Internal, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
0,X	VANCANNEYT G. ET AL: "Podshatter resistance: exploitation of Arabidopsis genes to develop a productivity trait in oilseed rape" XIII INTERNATIONAL CONFERENCE ON ARABIDOPSIS RESEARCH, 'Online! no. 5-29, 28 June 2002 (2002-06-28) - 2 July 2002 (2002-07-02), XP002299830 Retrieved from the Internet: <URL:www.arabidopsis.org/news/events.jsp> 'retrieved on 2004-10-13! abstract ---	1-4, 7-27, 30, 31
X	WO 01/79517 A (UNIV CALIFORNIA) 25 October 2001 (2001-10-25) cited in the application the whole document --- -/--	28-30

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

° Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

8 October 2004

Date of mailing of the international search report

02/11/2004

Name and mailing address of the ISA

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Authorized officer

Kania, T

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 99/00502 A (UNIV CALIFORNIA) 7 January 1999 (1999-01-07) cited in the application ---	
A	WO 01/59122 A (INST OF MOLECULAR AGROBIOLOGY ; SUNDARESAN VENKATESAN (SG); RAJANI SAR) 16 August 2001 (2001-08-16) cited in the application ---	
A	RAJANI SAROJAM ET AL: "The Arabidopsis myc/bHLH gene alcatraz enables cell separation in fruit dehiscence" CURRENT BIOLOGY, vol. 11, no. 24, 11 December 2001 (2001-12-11), pages 1914-1922, XP002299827 ISSN: 0960-9822 cited in the application ---	
A	LILJEGREN SARAH J ET AL: "SHATTERPROOF MADS-box genes control seed dispersal in Arabidopsis" NATURE (LONDON), vol. 404, no. 6779, 13 April 2000 (2000-04-13), pages 766-770, XP002299828 ISSN: 0028-0836 cited in the application ---	
A	YU HAO ET AL: "AGAMOUS-LIKE 24, a dosage-dependent mediator of the flowering signals." PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol. 99, no. 25, 10 December 2002 (2002-12-10), pages 16336-16341, XP002299829 ISSN: 0027-8424 -----	

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

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Information on patent family members

International Application No

PCT/EP2004/006888

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 0179517	A	25-10-2001	AU	5702401	A	30-10-2001
			CA	2406388	A1	25-10-2001
			EP	1272651	A2	08-01-2003
			WO	0179517	A2	25-10-2001
WO 9900502	A	07-01-1999	US	6198024	B1	06-03-2001
			AU	8168698	A	19-01-1999
			AU	8376098	A	19-01-1999
			CA	2294211	A1	07-01-1999
			CA	2296007	A1	07-01-1999
			CN	1271388	T	25-10-2000
			CN	1272885	T	08-11-2000
			EP	1002087	A1	24-05-2000
			EP	0998566	A1	10-05-2000
			WO	9900502	A1	07-01-1999
			WO	9900503	A1	07-01-1999
			US	6229068	B1	08-05-2001
			US	6288305	B1	11-09-2001
			US	6541683	B1	01-04-2003
WO 0159122	A	16-08-2001	WO	0159121	A1	16-08-2001
			AU	2841500	A	20-08-2001
			AU	3433301	A	20-08-2001
			CA	2399900	A1	16-08-2001
			CN	1401002	T	05-03-2003
			EP	1255838	A1	13-11-2002
			WO	0159122	A1	16-08-2001
			US	2003208787	A1	06-11-2003

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